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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/682,238
Filing Date: August 08, 2001
Appellant(s): LAFERRIERE ET AL.

Tait R. Swanson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/19/2005

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6,514,085 Slattery et al.

US 6,608,628 Ross et al.

Microsoft Windows 2000 - Administering an ISP Installation, P. 1, http://www.microsoft.com/resources/documentation/Windows/2000/server/reskit/en-us/Default.asp?url=/resources/documentation/Win

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 16-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slattery et al. (USPN 6,514,085; hereinafter Slattery) in view of Ross et al. (USPN 6,608,628; hereinafter Ross).

Independent claims

Regarding claim 16, Slattery discloses a method for remotely training persons, the method comprising: providing a collaborative computing environment, via Telnet, between a trainee and a remote trainer for chemistry equipment or any other type of device (Col. 3, lines 49-52), the collaborative computing environment comprising a first computing system (which includes: trainee premise equipment 12, pod controller 24, and network application program 32, operated by the trainee in order to control user device 26/40 (Col. 6, lines 21-28); and a second computing system 906/908 operated by a trainer; and interactively instructing the trainee via the collaborative computing environment (Col. 4, lines 16-25); wherein interactively instructing the trainee includes controlling the pod controller 24 of the first/trainee computing system via the second/trainer computing system 906/908 (Col. 7, line 40 – Col. 8, line 5).

Regarding claim 28 Slattery discloses a method for collaborating between remote computing environments, including the steps of: initiating a link between remote computing environments (Col. 4, lines 12-14); sharing a graphical user interface with the remote computing environments (Col. 7, lines 54-60); collaboratively interacting with a device coupled to one of the remote computing environments (Col. 7, line 40 – Col. 8, line 5); and wherein the second computing system 906/908 interacts with the device 26/40 by controlling the pod controller 24 of first computing system.

Regarding claim 34, Slattery discloses a system with collaborative, remote computing environments, comprising a first computing system (which includes: trainee premise equipment 12, pod controller 24, and network application program 32) coupled to user device 26/40; a second computing system 906/908 remotely coupled to the first computing system via a network; a user interface shared by

the first and second computing systems for collaboratively interacting with device 26/40 (Col. 7, line 40 – Col. 8, line 5); and wherein the second computing system 906/908 interacts with the device 26/40 by controlling the pod controller 24 of first computing system.

Slattery discloses all of the claimed subject matter of independent claims 16, 28, and 34 with the exception of explicitly disclosing that device 26/40 is a medical diagnostic imaging system. Instead, Slattery teaches a first/trainer computer system that is coupled to user devices such as programmable logic controllers (PLCs), chemistry equipment or any other type of device. See Col. 3, lines 50-52. However, Ross teaches a collaborative computing environment allowing users to view and manipulate images generated by a medical diagnostic imaging system (Col. 1, lines 36-39; Col. 2, lines 40-48). Thus, in view of Ross, it would have been obvious to one of ordinary skill in the art to modify the collaborative training environment described in Slattery by providing a collaborative environment for a medical imaging device in order provide collaborative training directed to physicians in the field of medicine by allowing multiple users at different computer systems to collaboratively view and interact with biomedical images in real-time, thereby allowing remotely located physicians to collaborate by viewing an image of an anatomical object simultaneously and to provide instruction to a remotely located physician (See Ross, Col. 11, lines 48-50). Furthermore, with respect to claim 16, it is noted that the limitation "for a medical diagnostic imaging system" is a recitation of the intended use and does not result in a structural difference between the claimed invention and the prior art. It is the examiner's position that the structure of the user devices 26/40 in Slattery is capable of performing the intended use, and therefore meets the claim.

In addition, with respect to independent claims 16, 28, and 34, Slattery discloses a collaborative remote computing environment using a Telnet network application program (See Col. 7, lines 40-50). However, it is not explicitly stated that the Telnet network application program is capable of supporting *platform-independent operating systems*. Although not explicitly stated, it is the examiner's position that

it is well known that Telnet protocol supports connections from various client computers running different operating systems such as UNIX-based and Widows-based computers. *See Microsoft Windows 2000 – Administering an ISP Installation, lines 1-8.* Therefore, if not inherent in the protocol of the Telnet network application program described in Slattery, it would have been obvious to one of ordinary skill in the art to modify the protocol of the Telnet network application program described in Slattery, by providing a Telnet application program that provides a collaborative environment between a plurality of client computers running *different operating systems*, thereby allowing one client computer to execute commands on a second remote client computer running a windows-based or UNIX-based operating system. *See Microsoft Windows 2000 – Administering an ISP Installation, lines 1-8.*

Dependent claims

Regarding claim 17, Slattery does not explicitly disclose a UNIX operating system. However, it would have been an obvious matter of design choice to select a specific operating system for a computer, wherein no stated problem is solved or unexpected result is obtained by prescribing a UNIX operating system. Therefore it would have been obvious to an artisan to modify the computer system described in Slattery by providing a UNIX operating system in order to allow users and application programs to control the computer hardware.

Regarding claim 18,Slattery discloses a method wherein providing the collaborative computing environment comprises providing a shared user interface (Col. 7, lines 54-60).

Regarding claims 19, 32, and 42, Slattery discloses a remote collaborative environment of shared interfaces with the capability of capturing, transmitting screen data between computing systems (Col. 7, lines 54-60). Slattery does not explicitly disclose the feature of caching screen data. However, it is the examiner's position that providing a cache memory assembly in the central processing unit of a computer is notoriously well known feature for improving data transfer time, and it would have been obvious to a

person of ordinary skill in the art to provide caching of computer data in order to provide faster delivery of information (See Newton's Telecom Dictionary, P. 120 cache memory).

Regarding claims 20 and 39, Slattery discloses a method wherein providing the shared user interface comprises providing mutual operability of an application configured for training the trainee (Col. 4, lines 17-19).

Regarding claim 21, Slattery discloses a method wherein providing the shared user interface comprises simulating a graphical user interface for the device (Col. 5, lines 44-47).

Regarding claims 22 and 31, Slattery discloses a method and system wherein the collaborative computing environment comprises capturing screen data for a first display and transmitting the screen data to a second display (Col. 7, lines 54-60).

Regarding claims 23 and 25, Slattery discloses that the step of interactively instructing the trainee comprises remotely interacting with pod controller 24's operating system (software that controls the allocation of usage of hardware resources) for controlling chemistry devices 26/40. See Col. 3, line 67 – Col. 4, line 25.

Regarding claim 26, Slattery discloses a method wherein interactively instructing the trainee comprises remotely responding to operations of the device 26/40. See Col. 9, lines 5-16.

Regarding claim 27, Slattery discloses a method wherein interactively instructing the trainee comprises remotely interacting with a plurality of geographically separate trainees via the collaborative computing environment (Col. 8, lines 33-43).

Regarding claims 24 and 29, Slattery discloses all of the claimed subject matter with the exception of disclosing that the collaborative environment has platform-independent operating systems. Although not explicitly stated, it is the examiner's position that it is well known that Telnet supports connections from various client computers running Unix-based and Widows-based computers (See Microsoft Windows 2000 – Administering an ISP Installation, lines 1-5). In addition, Ross discloses a

collaborative environment having platform-independent operating systems (Col. 5, lines 59-66). Hence, in view of Ross it would have been obvious to one of ordinary skill in the art to modify the collaborative environment described in Slattery by providing platform-independent operating systems in order to implement the collaborative visualization and interaction of data on any suitable platform including a conventional PC, a workstation, or PC-based systems located in a spacecraft.

Regarding claim 30, Slattery discloses a method wherein providing the shared user interface comprises providing independent and mutual operability of an application associated with the graphical user interface (Col. 4, lines 17-19).

Regarding claim 33, Slattery discloses a method, wherein collaboratively interacting with the device comprises collaborating operations with a plurality of persons operating in the remote computing environment (Col. 4, lines 38-42).

Regarding claims 35-38, Slattery discloses a system wherein the user interface comprises a graphical interface operable on one of the first and second computing systems, wherein the graphical interface is simulated on one of the systems and wherein the simulation comprises screen data corresponding to the graphical interface (Col. 7, lines 54-60).

Regarding claim 40, Slattery discloses a system wherein the user interface facilitates real-time shared operability of the device (Col. 4, lines 40-42).

Regarding claim 41, Slattery discloses all of the claimed subject matter with the exception of explicitly disclosing a safety routine to prevent undesirable operation of the medical diagnostic imaging system. However, it is the examiner's position that providing a safety routine to prevent undesirable operation of a system is a notoriously well known feature for limiting the exposure of a computer or a group of computers to an attack from outside. Therefore, it would have been obvious to a person of ordinary skill in the art to provide a safety routine in order to protect the system (See Newton's Telecom Dictionary, P. 299 firewall).

NEW GROUNDS OF REJECTION

In light of applicant's interpretation of the first computing system, the following new grounds of rejection are provided below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 16 is rejected under 35 U.S.C. 102(b) as anticipated by Stein (USPN 5,684,952) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ross et al. (USPN 6,608,628; hereinafter Ross).

Regarding claim 16, Stein discloses a method for remotely training persons, the method comprising: providing a collaborative computing environment, between a trainee and a remote trainer, the

collaborative computing environment comprising a first computing system 12 operated by the trainee; and a second computing system 10 operated by a trainer; and interactively instructing the trainee via the collaborative computing environment; wherein interactively instructing the trainee includes controlling the first/trainee computing system via the second/trainer computing system using control button 74 (See Stein, Col. 6, line 66 – Col. 7, line 7); wherein the controlling is performed in an operating system-independent manner. For example, the operating system of the teacher controls the student workstation independent of any control of the operating system of the student workstation (See Col. 7, lines 4-6). Stein does not explicitly disclose that the collaborative computing environment is *for a medical diagnostic imaging device*. However, it is noted that the claimed limitation "for a medical diagnostic imaging system" is a recitation of the intended use and does not result in a structural difference between the claimed invention and the prior art.

In the alternative, Ross teaches a collaborative computing environment allowing users to view and manipulate images generated by a medical diagnostic imaging system (Col. 1, lines 36-39; Col. 2, lines 40-48). In view of Ross, it would have been obvious to one of ordinary skill in the art to modify the collaborative training environment described in Stein, by providing a collaborative environment for a medical imaging device in order provide collaborative training directed to physicians in the field of medicine by allowing multiple users at different computer systems to collaboratively view and interact with biomedical images in real-time, thereby allowing remotely located physicians to collaborate by viewing an image of an anatomical object simultaneously and to provide instruction to a remotely located physician. See Ross, Col. 11, lines 48-50.

(10) Response to Argument

Regarding claim 16, Appellant's threshold argument is that the combination of Slattery and Ross fails to teach the feature of "providing a collaborative computing environment ... comprising a first

computing system operated by the trainee and a second computing system" and "controlling the first computing system via the second computing system".

Regarding claim 28, Appellant's threshold argument is that the combination of Slattery and Ross fails to teach the feature wherein "the second remote computing environment interacts with the medical diagnostic imaging system via the first remote computing environment".

Regarding claim 34 Appellant's threshold argument is that the combination of Slattery and Ross fails to teach the feature wherein "the second computing system interacts with the medical diagnostic imaging system by controlling the first computer system.

Appellant supports these arguments by stating that the mentor computer described in Slattery directly controls device 40 and does not control device 40 *through the student computer*. Appellant further emphasizes that "As the instructor terminal directly controls device 40 independent of the student computer, the cited reference cannot be reasonably considered to disclose "controlling the first computing system [operated by the trainee] via the second computing system" (See brief, .P.6, lines 5-8).

It is the examiner's position that appellant's interpretation of the *first computing system* [operated by the trainee] is substantially narrower than what would be considered reasonable to one of ordinary skill in the art. The first computing system, as interpreted by appellant, significantly limits the first computing system as being a computing system that *solely consists* of a student terminal. However, neither the claims nor the specification support this interpretation. For example, appellant's specification provides the following description of the first computing system (controlled computer system 12) operated by a trainee:

> "...a controlled computer system 12 is linked to a controlling computer system 14. The controlled and controlling computer systems 12 and 14 may include any suitable computers employing various hardware, firmware, and software platforms". *See appellant's specification, P.5, ¶ 18.*

Accordingly, the examiner's interpretation of the first computing system is not limited to solely providing a student terminal, but instead all necessary hardware, firmware, and software so that the first

computing system operates properly and provides student training. Slattery discloses a first computing system wherein a trainee operates premise equipment 12, pod controller 24, and network application program 32 in order to control user devices 26/40 to receive training. See Slattery, Col. 6, lines 21-28:

> "...the server and controller 20 sends an instruction to the firewall 16 to permit the user's CPE 12 to access the pod controller 24...the user then connects to the pod controller 24 using a network application program 32, such as Telnet... Through this mechanism the user can exercise control over the user devices and perform the assigned training exercise."

The first computing system operated by the trainee in the Slattery reference is therefore not limited to a system consisting solely of a student terminal. Instead, the first computing system requires a trainee to *operate* a computing system comprising: premise equipment 12, pod controller 24, and network application program 32 in order to control user devices 26/40. Furthermore, mentor communications module 306 of pod controller 24 permits the mentor computer 906 to monitor and participate in controlling user devices. See Slattery, Col. 3, line 7 – Col. 4, line 25; Col. 7, line 65 – Col. 8, line 5. Given that the pod controller 24 is an integral component of the first computing system [operated by the trainee], and must operate together with premise equipment 12 and network application program 32 in order to control user devices 26/40, the examiner's broader interpretation is deemed reasonable. Therefore, it is the examiner's position that the mentor computer 906 controls user devices 26/40 by controlling pod controller 24 of the first computing system. See Figure 9 of Slattery on the next page, with illustrations of appellant and examiner's interpretations. (examiner would like to thank appellant for clarifying the typographical error discovered in this Fig. 9, of the Slattery reference):

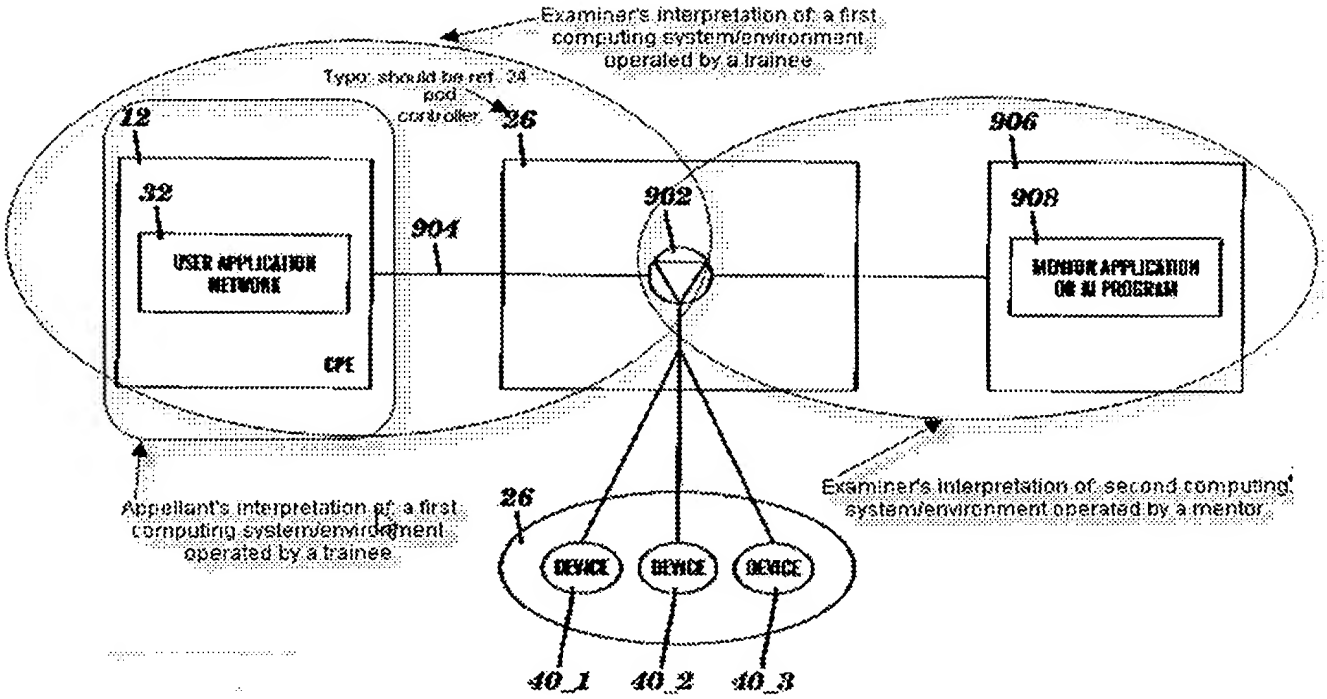

FIG. 9

Slattery demonstrates the claimed feature of controlling a first student computing system via a second mentor computing system in various ways. One example is that the mentor/trainer computing system/environment has the capability to *control* pod controller 24 of the first/trainee computer system/environment in order to permit trainee access to user devices 26/40. See Slattery, Col. 8, lines 57; Fig. 11. Furthermore, the following exhibits the feature of controlling a first student computer via a second mentor computer:

> "everything the user types can be seen by the mentor, and visa versa" (Col. 7, lines 58-60);
> "...this wiretap may permit the mentor to take control of the user devices in the pod so that the user can 'watch' the instructions the monitor is sending to the user devices. Thus the mentor can show the user how to correctly operate the user devices to perform a task." *See Slattery, Col. 7, line 65 – Col. 8, line 2.*

Even taking into account Appellant's interpretation of the claimed "first computing system" as consisting solely of a student terminal, it is noted that Slattery exhibits at least some control over the student terminal 12. Contrary to Appellant's assertion, the mentor computer system 906 does not operate

completely independent of the premise equipment/student terminal 12. Since the mentor has the capability to allow a student to watch how to correctly operate the user devices, it is the examiner's position that the mentor has the capability or control of displaying instructional content on the premise equipment/student terminal 12 via wiretap 902.

Additionally, with respect to independent claims 28 and 34, Slattery teaches the claimed features of providing a second computing system which interacts with chemistry equipment or other device, (as per claim 28) via the first remote computing environment and (as per claim 34) by controlling the first computer system. For instance, Slattery discloses a first computing system (which includes: trainee premise equipment 12, pod controller 24, and network application program 32) coupled to user device 26/40; a second computing system 906/908 remotely coupled to the first computing system via a network; a user interface shared by the first and second computing systems for collaboratively interacting with device 26/40 (Col. 7, line 40 – Col. 8, line 5); and wherein the second computing system 906/908 interacts with the device 26/40 by controlling the pod controller 24 of first computing system.

Regarding claim 23, Appellant argues that Slattery does not disclose the step of interactively instructing the trainee further comprising the step of remotely interacting with an operating system for the medical diagnostic imaging system. It is noted that the limitation "for a medical diagnostic imaging system" is a recitation of the intended use and does not result in a structural difference between the claimed invention and the prior art. Slattery discloses pod controller 24 having an operating system (software that controls the allocation of usage of hardware resources) for controlling devices such as PLCs or chemistry equipment 26/40. See Col. 3, line 67 – Col. 4, line 25.

Regarding claim 26, Appellant emphasizes that the examiner's citation of Slattery does not discloses the feature of interactively instructing the trainee by remotely responding to operations of the device 26/40. The examiner provides the following citation for clarification. See Col. 9, lines 5-16.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Cameron Saadat
Patent Examiner Art Unit 3715
April 28, 2006

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Conferees:

Robert Olszewski
SPE, TC 3700

Kathleen Mosser
Primary Examiner AU 3715

FREDERICK R. SCHMIDT
DIRECTOR
TECHNOLOGY CENTER 3700